

# PATENT ABSTRACTS OF JAPAN

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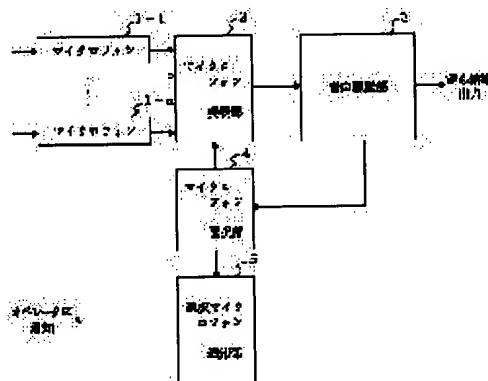
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## (54) SPEACH RECOGNITION DEVICE

### (57)Abstract:

**PURPOSE:** To provide a speech recognition device without causing enlargement and cost increase of the device itself according to the increase of the number of speech input means.

**CONSTITUTION:** This device is constituted of microphones 1-1 to 1-n being plural speech input parts, a speech recognition part 3 for recognizing the speech inputted to the microphones 1-1 to 1-n, a microphone connection part 2 for connecting the microphones 1-1 to 1-n with the speech recognition part 3, a microphone selection part 4 for selecting the microphone by the recognition result in the speech recognition part 3 and a selected microphone information part 5 for informing an operator of the microphone selected by the microphone selection part 4.



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DETAILED DESCRIPTION

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[Detailed description]

[0001]

[Field of the Invention] this invention relates to the voice recognition unit which performs voice input from two or more voice input sections especially about a voice recognition unit.

[0002]

[Prior art] In the conventional voice recognition unit which has two or more voice input meanses (microphone etc.), priority is attached to each voice section from the earlier one of the input start time, or the earlier one of the end time, and the voice data of each voice section is saved for the input voice store means corresponding to each voice input means temporarily at the same time only the section of the voice inputted from each voice input means is started. Then, speech recognition about the voice data saved according to the added order was performed, and the recognition result was outputted (for example, refer to Provisional-Publication-No. 256397 [ 61 to ] official report).

[0003]

[Object of the Invention] However, in the conventional voice recognition unit mentioned above, in order to always enable the input of the voice from two or more voice input meanses, you have to establish an input voice store means to save the voice data inputted from each voice input means, several minutes of a voice input means. Therefore, when the number of voice input meanses increases, in connection with it, the equipment itself large-sized-izes or there is a trouble of a grade where a cost becomes high.

[0004] this invention is made in view of the trouble which a Prior art which was mentioned above has, and aims at offering the voice recognition unit which large-sized-izing or a cost rise of the equipment [ itself ] accompanied by it do not produce even if the number of voice input meanses increases.

[0005]

[The means for solving a technical problem] In order to attain the above-mentioned purpose, this invention chooses the input of the voice from the voice input section installed in two or more locations, respectively. When it is the voice recognition unit which recognizes selected voice and voice is inputted from the aforementioned voice input section The speech recognition section which detects the voice input section into which voice was inputted among two or more aforementioned voice input sections, performs the audio analysis and the audio recognition which were inputted, and outputs a recognition result, The microphone connection which makes connection between each aforementioned voice input section and the aforementioned speech recognition section, It is characterized by having the microphone selection section which chooses the input of the voice from the aforementioned voice input section by switching the connection status of the aforementioned voice input section and the aforementioned speech recognition section in the aforementioned microphone connection by the analysis in the aforementioned speech recognition section, and the detection result.

[0006] Moreover, it is characterized by having the notice section of a selection microphone which outputs the selection result in the aforementioned microphone selection section.

[0007]

[Operation] In this invention constituted as mentioned above, if voice is inputted from the voice input

section, using the information on the voice inputted into the speech recognition section, henceforth, the microphone selection section will maintain the connection between the voice input section whose voice input becomes possible, and the speech recognition section, and will break off the connection between other voice input sections and the speech recognition section. Therefore, the right of an input of the voice to the speech recognition section is monopolized by the selected voice input section, and the input of the voice to the speech recognition section is always restricted from the one voice input section until the signal of the purport of selection cancel is inputted from the voice input section connected with the speech recognition section and the connection between all the voice input sections and the speech recognition section restores after that.

[0008]

[Example] Below, the example of this invention is explained with reference to a drawing.

[0009] Drawing 1 is drawing showing the configuration of one example of this invention.

[0010] The microphone 1-1 which are two or more voice input sections as this example is shown in drawing 1, - 1-n, The speech recognition section 3 for recognizing the voice inputted into the microphone 1-1 - 1-n, The microphone connection 2 which makes connection between the microphone 1-1 - 1-n, and the speech recognition section 3, It consists of the microphone selection section 4 which chooses a microphone by the recognition result in the speech recognition section 3, and the notice section 5 of a selection microphone which notifies an operator (un-illustrating) of the microphone chosen in the microphone selection section 4.

[0011] Below, an operation of this example of a configuration of having mentioned above is explained.

[0012] As an initial state, all the microphones 1-1 - 1-n are chosen in the microphone selection section 4, and, thereby, all the microphones 1-1 - 1-n are connected with the speech recognition section 3 in the microphone connection 2.

[0013] The voice inputted in the speech recognition section 3 when voice was inputted from the microphone 1-1 is analyzed, the microphone into which voice was inputted simultaneously is detected, and if the inputted voice is judged to be the voice of the purport of microphone selection, the detection result of a microphone will be sent to the microphone selection section 4.

[0014] If the detection result of a microphone is sent to the microphone selection section 4, the connection status with the speech recognition section 3 in the microphone connection 2 will be switched only to a microphone 1-1.

[0015] Moreover, simultaneously, the signal of a purport with which only the microphone 1-1 is connected with the speech recognition section 3 is sent to the notice section 5 of a selection microphone, and an operator is notified of only the microphone 1-1 being connected now at the speech recognition section 3 among two or more microphones 1-1 - 1-n by the notice section 5 of a selection microphone.

[0016] Here, the input of the voice from other microphones cannot be performed in the status that one microphone is chosen.

[0017] And an audio input is performed from a microphone 1-1 to the speech recognition section 3, and the recognition result of the voice inputted from the speech recognition section 3 is outputted.

[0018] After the general voice input from a microphone 1-1 is completed, the voice of the purport of microphone selection cancel is inputted by the operator through a microphone 1-1.

[0019] Then, the signal of the purport of microphone selection cancel is sent to the microphone selection section 4 like the time of microphone selection.

[0020] If the signal of the purport of microphone selection cancel is sent to the microphone selection section 4, the connection status of the speech recognition section 3, and the microphone 1-1 - 1-n in the microphone selection section 2 will be switched by the microphone selection section 4, and all the microphones 1-1 - 1-n will be chosen, and it will connect with the speech recognition section 3.

[0021] If all the microphones 1-1 - 1-n are connected with the speech recognition section 3, an operator will be notified of all the microphones 1-1 - 1-n being chosen by the notice section 5 of a selection microphone, and connecting with the speech recognition section 3.

[0022] In the status that all the microphones 1-1 - 1-n are chosen, an audio input is attained from all the microphones 1-1 - 1-n.

[0023]

[Effect of the invention] Since this invention is constituted as explained above, it does so an effect which is indicated below.

[0024] If voice is inputted into a claim 1 from the voice input section in the thing of a publication, using the information on the voice inputted into the speech recognition section The microphone selection section maintains henceforth the connection between the voice input section whose voice input becomes possible, and the speech recognition section, and it writes as the configuration which severs the connection between other voice input sections and the speech recognition section. Also in the voice recognition unit which has two or more voice input sections, the input of the voice to the speech recognition section is always restricted from the one voice input section. Thereby, even if the number of the voice input sections increases, large-sized-izing of the equipment [ itself ] and the occurrence of a cost rise accompanied by it can be prevented.

[0025] Since the notice section of a selection microphone which outputs the selection result in the microphone selection section in a thing given in a claim 2 was prepared, when an operator is going to input voice, it can judge easily whether it can input or not.

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[Translation done.]

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**CLAIMS**

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[Claim]

[Claim 1] The input of the voice from the voice input section installed in two or more locations, respectively is chosen. When it is the voice recognition unit which recognizes selected voice and voice is inputted from the aforementioned voice input section The speech recognition section which detects the voice input section into which voice was inputted among two or more aforementioned voice input sections, performs the audio analysis and the audio recognition which were inputted, and outputs a recognition result, The microphone connection which makes connection between each aforementioned voice input section and the aforementioned speech recognition section, The microphone selection section which chooses the input of the voice from the aforementioned voice input section by switching the connection status of the aforementioned voice input section and the aforementioned speech recognition section in the aforementioned microphone connection by the analysis in the aforementioned speech recognition section, and the detection result, The voice recognition unit characterized by \*\*\*\*ing.

[Claim 2] The voice recognition unit characterized by having the notice section of a selection microphone which outputs the selection result in the aforementioned microphone selection section in a voice recognition unit given in a claim 1.

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[Translation done.]